

Notice of Allowability

Application No.

09/810,217

Examiner

Hai C Pham

Applicant(s)

SAITO ET AL.

Art Unit

2861



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 01/20/04.
2. ☒ The allowed claim(s) is/are 1-4, 10 and 11.
3. ☒ The drawings filed on 06/25/01 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: Claims 1 and 10 are patentable over the prior art patents and printed publications because of the specific controller provided to the optical scanning apparatus for individually controlling an inclination angle of an arrangement direction of the array of light emitting devices of each of the two semiconductor laser light sources with respect to a beam scanning direction, wherein said inclination angle of each of the two semiconductor laser light sources is detected and controlled so that all beam intervals on a scanning surface are kept in a predetermined equal value during recording operation. This serves to even further stabilize the interval between the scanning positions of the beams at a set value as well as correcting any possible shift in relative position between the two semiconductor laser light sources and is not taught by the art of record alone or in combination.

Claims 3 and 4 are patentable over the prior art patents and printed publications because of the specific controller provided to the optical scanning apparatus for controlling a beam interval in the perpendicular direction to a beam scanning direction between scanning beams out of the two semiconductor laser light sources, each of which includes a plurality of light emitting devices arranged in a line at equal intervals, wherein said controller comprises detecting means for detecting scanning positions of a reference beam specified respectively from output beams out of each of said two laser light sources, and keeping means for keeping the beam interval between said reference

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beam in a predetermined value during recording operation. This serves to even further stabilize the interval between the scanning positions of the beams at a set value as well as correcting any possible shift in relative position between the two semiconductor laser light sources and is not taught by the art of record alone or in combination.

Claims 2 and 11 are allowed because they are directly dependent from claims 1 and 10, respectively.

The prior art made of record, Yamaguchi (U.S. 6,133,566), teaches an optical scanning apparatus having at least two semiconductor laser light sources, each having a plurality of light emitting devices arranged in a line at equal intervals p , and an adjusting mechanism for adjusting the inclination angle of the at least two semiconductor laser light sources so that all beam intervals on a scanning surface are kept in a predetermined equal value during recording operation. However, Yamaguchi teaches the relative arrangement of the at least two semiconductor laser light sources being first adjusted during the insertion of the at least two semiconductor laser light sources into the common holder to form a single light source unit, then the inclination angle of the laser unit is adjusted as a whole so that all beam intervals on a scanning surface are kept in a predetermined equal value during recording operation. Therefore, Yamaguchi fails to the separate inclination angle control of each of the at least two semiconductor laser light sources.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HAI PHAM
PRIMARY EXAMINER

April 10, 2004